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China's and India's Emerging Energy Foreign Policy

Sascha Müller-Kraenner

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Sascha Müller-Kraenner is a Senior Policy Advisor to Ecologie, a Berlin based environmental policy thinktank. He has published extensively on issues of international energy policy and environmental diplomacy. His book “Energiesicherheit – Die neue Vermessung der Welt” was published by Kunstmann in spring 2007.
E-Mail: Sascha@ecologic.de

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Tulpenfeld 6, 53113 Bonn
☎ +49 (0)228 94927-0
☎ +49 (0)228 94927-130
E-Mail: die@die-gdi.de
www.die-gdi.de

Foreword

In its research, consulting activities and training courses the German Development Institute (DIE) has focused on developing strategies, approaches and instruments to cope with emerging global development problems. In particular, three global challenges are widely addressed in our the DIE's work: First, globalization has changed the character of development problems as such. Increasing interdependency of local problems like poverty and violent conflict has led to the emergence of complex global problems, which only can be dealt with through collective action. Secondly, new state and non-state actors are more and more influencing global politics. Thus, cooperation patterns in international politics are changing. Thirdly, multilateral institutions and fora are needed in order to resolve global problems collectively. If this shall be successful, a fundamental reform of the present global governance architecture is required.

Against this background DIE's work aims at contributing to find constructive solutions to global challenges. Therewith, special attention is given to a new group of actors, the "emerging powers of the South" (Anchor countries). According to DIE's definition the group of anchor countries comprises large developing countries, which differ from typically "smaller" developing countries with regard to their economic size, their regional and global power as well as their potential to endanger or stabilize their regional and/or global environment.¹ Since 2004 DIE has published on economic, political and social developments of anchor countries as well as their role in regional and global politics. This series of DIE *Discussion Papers* is continued with the present work of Sascha Müller-Kraenner. He focuses on China's and India's foreign policies, which have been subject to major changes due to the countries' increasing demand of energy resources. These emerging foreign energy policies are fundamentally contributing to a geopolitical shift in global politics and to changing North-South-relations. For instance, in order to meet their demands in the energy sector, both anchor countries have been enhancing their relations with resource rich countries in Africa. In consequence, South-South cooperation is strongly enforced and the role of developing countries in global politics strengthened. In the context of DIE's work on global governance issues and anchor countries this Discussion Paper contributes to a better understanding of current global changes relevant to the solution of global problems such as scarce energy resources.

Bonn, 2 July 2008

Julia Leininger

1 The group of anchor countries comprises Brazil, China, India, Indonesia, Iran, Mexico, Nigeria, Pakistan, Russia, South Africa, Thailand and Turkey.

Abstract

This article aims at analyzing the changing energy foreign policies of the Anchor countries China and India. Both countries' economies are growing at an unprecedented pace. Due to high economic growth based on rapid industrialisation the energy consumption of both countries is rising fast. Against this background it is explored how the quest for energy security has transformed both countries' foreign policies. In fact, energy and, to an increasing extent, climate change, have become defining elements of both countries' foreign policy as well as of the international context in which they find themselves. A new "energy foreign policy" which transforms the character of existing geopolitical rivalries is emerging. Outside actors such as the European Union must react to these developments when shaping their policy responses. International institutions and governance structures have to adapt to take into account the growing weight of China, India and other emerging economies. Last but not least, energy security and climate change considerations should be merged into an integrated sustainable energy policy.

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Abbreviations

ASEAN	Association of Southeast Asian Nations
CCS	Carbon Capture and Storage
CNPC	China National Petroleum Company
CO ₂	Carbon dioxide
DIE	Deutsches Institut für Entwicklungspolitik (German Development Institute)
EIA	Energy Information Agency
ESS	European Security Strategy
EU	European Union
IEA	International Energy Agency
IFIs	International Financing Institutions
IMF	International Monetary Fund
OECD	Organisation for Economic Cooperation and Development
OPEC	Organization of the Petroleum Exporting Countries
SCO	Shanghai Cooperation Organisation
UN	United Nations
UNCLOS	UN Convention on the Law of the Sea
UNFCCC	United Nations Framework Convention on Climate Change
US	United States
WTO	World Trade Organization

Introduction

Over the past five years, the growing economic and demographic weight of China, India and other emerging economies has led to an impressive shift in the status of those countries regionally as well as globally. The foreign policy of both China and India is rapidly changing. Energy security and climate change are defining elements of this shift from being emerging economy to becoming emerging power, both regionally and more and more of a global scope. China's and India's international partners, not least the European Union, have to re-orient their foreign policy strategies accordingly.

China's and India's economies are growing at an unprecedented pace. Due to high economic growth based on rapid industrialisation the energy consumption of both countries is rising fast. Both countries have joined the group of the world's biggest importers of oil and gas. China relies on its state energy companies to access new resources at home and abroad. India's energy sector is mainly privatised. However, India's government plays an important role in politically supporting the international expansion of its energy sector.

The following article explores how the quest for energy security has transformed both countries' foreign policies. In fact, energy and, to an increasing extent, climate change, have become defining elements of both countries' foreign policy as well as of the international context in which they find themselves. A new "energy foreign policy" which transforms the character of existing geopolitical rivalries is emerging.

Outside actors such as the European Union must react to these developments when shaping their policy responses. International institutions and governance structures have to adapt to take into account the growing weight of China, India and other emerging economies. Last but not least, energy security and climate change considerations should be merged into an integrated sustainable energy policy.

1 Energy trends for China and India²

The economies of China and India are booming and their increasing energy demand is not only transforming the world's energy markets but also changing the geopolitical setting.

Trends for China

Following its economic development, China's demand for energy, particularly oil, has skyrocketed. Industrialization and improvement in living standards have entailed a surge in energy consumption. Between 1993 and 2006, China's oil consumption nearly doubled from 2.9 million barrels per day (b/d) to 7 million, representing an annualized growth rate of 7 % (EIA 2005; EIU 2006). The Chinese government estimates that the demand for energy will double from 2005 to 2015. Estimates from the International Energy Agency (IEA) are more cautious but also expect dramatic increases of energy demand.

In order to meet increased demand for oil, China has been a net oil importing nation since 1993, overtaking Japan in 2003 to become the world's second largest oil consumer after the United States (EIU 2006). In 2004, 40 % of oil supply in China was imported. The 2004 IEA report estimates that by 2030, the proportion of imported oil will exceed 70 % of domestic demand (IEA 2004). The increasing energy demand from China – and India to a certain degree – has often been blamed as one of the major drives behind the current and future high oil prices. While the debate over the degree of the “China effect” on escalating oil prices continues, statistics show that China single-handedly contributed to 25 % of the incremental world demand for primary oil between 1998 and 2003 (IEA 2004). China is one of the world's most “oil intensive” economies and uses an above average amount of oil per unit of economic production.

Despite the surging demand, domestic supply of oil has been a disappointment. New sources in the Western and Southern provinces of Xinjiang and Tibet have underperformed. Off-shore production will remain controversial as long as competing claims with neighbouring nations on maritime borders are not settled. Between 1993 and 2002, the oil consumption increased from 2.9 b/d to 5.4 million b/d, while domestic oil production only grew from 2.9 million b/d to 3.4 million b/d (Downs 2004). The existing oil production capacity is also deteriorating from maturing³ without new domestic oil fields large enough to meet its current and future energy needs. In the meantime, not only the absolute quantity but also the significance of oil and gas relative to other energy sources will increase – the share of energy mix for oil and natural gas is projected to increase from 25 % and 3 % in 2000 to approximately 27 % and 7 % by 2030 (Downs 2004). As China becomes increasingly dependent on imported oil, it will inevitably increase its exposure to the price volatility of the energy market.

China is, by far, the world's biggest producer of coal. In 2004, coal production reached almost two billion tons which amounts to 42 % of world production. Coal mining as well

2 All numbers, if not otherwise stated, come from: International Energy Agency (2006).

3 Out of the total crude oil production at 3.6 million b/d, a single field in Daqing accounts for approximately 900,000 b/d of China's domestic crude oil production. Daqing has been in operation since 1963, however, and its production fell around 5 % in 2004 (<http://www.eia.doe.gov/emeu/cabs/china.html>).

as coal based electricity production leads to immense environmental and health problems. Air quality in China's Northeast, including the capital city of Beijing, has deteriorated accordingly. China's State Environmental Protection Agency (SEPA) estimates that the financial equivalent of those environmental damages is already outgrowing annual economic growth. Modernising China's coal sector is a major challenge and will need both international support as well as new innovative financing schemes on an international scale. The upcoming UN climate negotiations in Bali provide an opening for the financing of technology transfer of a much larger scale than previously seen.

The future of China's – and for that matter India's – coal is one of the determining factors for the future of the world's climate. If both nations continue to base their energy economies on coal, the Intergovernmental Panel on Climate Change's (IPCC) greenhouse gas stabilisation target can only be achieved if new “carbon capture and storage” (CCS) technologies are applied to prevent the CO₂ (carbon dioxide) from burning coal to enter the atmosphere. As no one should expect that either nation gives up their only cheap domestic energy resource, technology transfer and innovative financing mechanisms to bring them to emerging economies on a large scale have to be a central element of the emerging post-Kyoto climate agreement.

China's natural gas strategy is motivated mainly by the country's air quality problems. The leadership in Beijing seems to be willing to supplement part of its cheap domestic coal in its electricity sector through imported natural gas. Until the late Nineties, natural gas played a minor role in China's energy mix as domestic resources are limited. In the medium term, natural gas may be imported from Russia and Kazakhstan. The necessary pipeline infrastructure is under development. Some domestic production, both on and off-shore, will supplement the country's natural gas strategy.

Nuclear power will continue to play a minor role for China's electricity production. Today's nuclear power plants cover 1.5 % of the country's primary energy demand. China plans to build 30 additional nuclear reactors until 2020 which will double this amount to 3 %. The role of nuclear power in China's energy mix is strategic in character. Nuclear power can provide “clean” electricity when other sources of electricity, as old coal powered plants, have to be shut down for air quality reason. The nuclear fuel cycle in which China's civilian nuclear plants are included, is closely linked with the country's nuclear weapon's program.

Reliable energy supply has become more and more of a problem for China's growing economy. Chinese companies complain about electricity black outs. During the summer, factories in urban conglomerates such as Beijing or Shanghai sometimes only work over night when electricity is not being used for millions of air conditioning units. China therefore intends to build a system of national reserves, similarly to the one that the Western member states of the International Energy Agency started to develop after the oil crises of the Seventies and Eighties. The difference however, is that China's system will remain purely national and contribute little to regional stability should a price or supply crisis hit its neighbours.

The potential for energy saving through the application of modern technological equipment and modernisation of old energy efficient buildings is enormous. New framework legislation for renewable energies is intended to transform China into a world

leader for solar thermal and geothermal energies, making China a serious competitor for European producers of renewable energy technology such as Germany.

In 2004, China already contributed 16.5 % of global CO₂ emissions (Yale Center for Environmental Law & Policy 2005). China will soon overtake the US as the world's major emitter. The IEA has estimated that this might already happen in 2007 although energy consumption numbers for the Chinese economy are highly unreliable and based on rough estimates of factors such as oil imports and domestic coal production. The IEA estimates that China's contribution to the world's CO₂ emissions could rise up to 40 % of global emissions by 2050. The trajectory of China's energy demand is therefore a determining factor for any future climate change scenarios.

Trends for India

India's rise as one of the world's major energy consumers shows many parallels to China. India was the fifth largest consumer of oil in the world during 2006 according to Energy Information Agency (EIA 2007). The Indian government estimates that the country's energy consumption will rise 50 % by 2015 based on 2005 levels. Similarly to China, reliable energy supply has become a limiting factor for the future development of India's economy, both for its emerging industry as for the country's rural development.

India's domestic coal reserve reaches 101,903 million tons with an annual production of over 400 million tons. While some coal is still being imported from Australia, Indonesia and South Africa, vast majority of the domestic demand is met with domestic production (EIA 2007).⁴ However, India, like China, faces sharp rise in oil consumption despite stagnant oil production levels. As a result, 70 % of the oil consumed in India must be imported, mainly from the Middle East. The IEA foresees that by 2030 oil imports will rise to 90 % and gas imports to 40 % to meet India's energy demand.

India still has one of the lowest CO₂ emission levels per capita. The Indian government has therefore steadfastly opposed any binding reduction commitments in the ongoing negotiations for a post-Kyoto climate regime. However, India has a developed renewable energy sector, based both on traditional and modern technologies. India's wind power industry is one of the world's technological leaders. India is one of the top five wind energy generating countries along with Germany, the United States (US), Denmark, and Spain (Herbert et al. 2006).

In the past few years, India has signed several long-term oil and gas delivery contracts with neighbouring countries in South and Central Asia, one of them being Iran. However, any land based gas transport from Iran would have to cross Pakistan, India's geopolitical rival. A gas deal with Iran would also antagonise the US.

India relies mainly on the international engagement of its private energy sector. Other than China's national oil companies and European or US based multinationals, India's private energy companies are seriously undercapitalised. India could access international development funding for regional energy development projects, however not for the

4 In 2004, India's estimated domestic coal consumption was 478.2 million tons, among which 443.7 million tons were supplied domestically.

international expansion of its energy companies. This has led to a close cooperation with Chinese efforts in Africa and Southeast Asia. Recently, the government has also started to back up the international engagement of its private energy companies with public diplomacy, although without the financial incentives that the Chinese provide to resource rich clients.

In 2005, India signed a far reaching energy cooperation agreement with the US (Chipaux 2006). The agreement still has to be ratified by both countries' parliaments and has therefore not yet entered into force. It contains provisions for technology cooperation and, most prominently, in the area of nuclear technology. After having tested nuclear weapons in the early Nineties, India was cut off from nuclear fuel and technology supply as part of an international embargo. This embargo might end if the "Nuclear Suppliers Group", a club that contains most country's that use nuclear technology, agrees to lift it. As is the case with China, India's military and civilian nuclear development is closely linked. Even after the Indian-US nuclear agreement, military installations will still be excluded from international controls. It is not clear yet which elements of India's fuel cycle will be transparent to the international community and which will remain secret under military control.

2 China's and India's new energy diplomacy

China's integration into the global economy has led to a transformation of its foreign policy (Wacker 2006; Scholvin 2007). Traditionally China has tried to remain self sufficient and mainly relied on domestic energy resources to drive its centrally planned economy. Since the economic liberalisation of the Eighties, energy consumption has dramatically increased and domestic supply cannot cover domestic demand anymore. China's economic as well as political rise is leading to tensions with its neighbours in the region as well as with other actors on the global political stage. The build up of China's army coincides with the re-orientation of China's foreign policy towards securing access to energy and mineral resources (Economist 2007).

China's new energy foreign policy – Between fear and self-confidence

Despite China's efforts to diversify its sources of energy supply, nearly half of China's imported oil came from the Middle East in 2005, with Saudi Arabia – a close ally of the US – accounting for 17 % in the first quarter (EIA 2005). The majority of these imports are transported via sea routes patrolled by the US navy. China therefore fears physical disruptions of its oil supplies, particularly by a deliberate US intervention (Downs 2004). In effect, China depends on the US to preserve stability in the Middle East and to secure the communication lines that run through Malacca Strait. Chinese energy analysts warn of an "energy containment" (Downs 2004) strategy against China during a possible Sino-American conflict over issues like Taiwan. Furthermore, the general political instability in the Middle East calls for diversifying energy sources to maintain a steady flow of energy supply.

As Middle Eastern oil has to be imported along vulnerable shipping lines, the government in Beijing supports a diversification strategy that includes oil and gas imports via land based pipelines from Russia, Central Asia and Southeast Asia. China's alliance building

with neighbours can to a large extent be explained through an energy import perspective. The Shanghai Cooperation Organisation (SCO), an economic and military alliance that includes China, Russia and the Central Asian nations, is a cornerstone of China's emerging energy foreign policy. The government in Beijing encourages its state energy companies to invest in new cross-border energy projects and a trans-Asian energy infrastructure.

However, China's energy rich neighbour, Russia, is also perceived as an unreliable supplier. Many of Russia's energy supply promises have gone unfulfilled with the price of Russian oil imports quadrupling in 2005 from the previous year while the actual delivery fell short by 8 million tons from the promised delivery of 15 million tons. China is also wary of Russia's aggressive and unpredictable oil diplomacy that often caters to the Kremlin's political and economic aspirations. In the past, the plans for constructing pipelines from Russia's Angarsk in the Far East to link with existing infrastructure at Daqing fell through when Yukos, the oil company representing Russia in the negotiations, went bankrupt in 2004 under the Kremlin's political pressures. The alternative plan to deliver crude oil from East Siberia to the Pacific was subsequently proposed by Transneft, Russia's government backed pipeline monopoly. Up to as late as July 2006, Russia was still tantalizing Japanese and Chinese lobbyists with different pipeline routes, extracting as much benefit as possible from the energy agreement. The recent energy cut-offs to Ukraine and Belarus most likely did further undermine Russia's reliability in the eyes of the Chinese officials.

Given China's uncomfortable dependence on the US and Russia, and lack of opportunity in the traditional oil fields in the Middle East, the government has intensified efforts to diversify imports. As a latecomer in the world energy market, China's unpopular energy investments in some of the oil-rich "rogue" states such as Iran, Sudan, Burma and Venezuela (Collier 2005), have spurred international criticism. However, China's sub-prime investments that exacerbate its relations with the Western countries and undermine UN sanctions are largely inevitable. *"In most parts of the world where the biggest [energy] opportunities are, the Western majors are already there,"* says Philip Andrews-Speed, a China energy expert at Scotland's University of Dundee in Edinburgh. In addition to the premium that Chinese companies often pay for energy asset acquisitions, China's scramble for energy investment opportunities could undermine the vision for becoming a responsible global power (Lelyveld 2006).

China, however, has not given up on the Middle East as a future source of oil imports. In April 2005, China's President Hu Jintao visited Saudi-Arabia for the first time. Earlier that same year, in January 2005, the Saudi King Abdullah had visited China on his first ever trip outside the Middle East region. In the last years, China has developed into one of the most important customers of the Middle Eastern oil producing countries and into a strategic alternative to European and American customers. Tellingly, the title of a major energy conference in Dubai, January 2006, was "Look East". America still dominates the security arrangements at the Gulf, but China's influence is rising.

When Hu Jintao came to Washington, DC in May 2005, the oil price had just passed the US\$ 70/barrel mark. Energy analysts agree that China's entrance into the world energy market is the determining factor of sustainable oil price increases. China and the US have become competitors on the world energy market. This new competition for resources

overlaps with a more general, emerging economic and political rivalry. Both nations are their respective most important trade partners but also compete for dominance in East Asia and increasingly on the global stage. The US navy still controls the sea lines in the Indian and Pacific oceans, including coastal waters that are essential trade routes for China's economy. US diplomats have started to criticise China's "mercantilistic" energy policy that tries to secure energy resources through long-term delivery contracts. The US government is advocating a liberalised world energy market where its private companies can compete on a level playing field. China argues that this playing field is strongly biased towards American interests, as the US has unchallenged political leverage in many oil producing regions such as with the Arab Gulf states.

The leadership in Beijing has coined the term of China's "peaceful rise", implying that neighbours and the global community do not have to be afraid that the new economic hegemon strives for a dominating role in regional politics too (Downs 2004).

In its East Asia neighbourhood, China competes with Japan and South Korea for resources (Gu / Kupfer 2006). The Sino-Japanese relationship is characterised by a mixture of resource and territorial conflicts over disputed high sea waters between both countries. Territorial conflicts around potential off-shore oil and gas fields exist between China and almost all its neighbours, including Vietnam and the Philippines.

China's relationship with the countries of South and Southeast Asia is less antagonistic (Gu / Kupfer 2006; Shambaugh 2005). China traditionally imports a significant amount of its oil from Indonesia. A new land pipeline – that brings the added advantage to avoid the Malakka sea route – will bring oil from Myanmar to China. India and China have started to coordinate the investment strategies of their state and private energy companies abroad, both in the Central Asian region as towards Iran and in far away places like Africa. On nuclear technology however, China continues to cooperate with Pakistan.

Central Asia

Central Asia has increasingly become a corner stone of China's energy security policy. On the diplomatic side, China has emphasized regional cooperation that encompasses Russia and Central Asia on important energy issues. Out in the oil fields, Chinese national oil companies continue to compete fiercely for multi-billion dollar deals to acquire and develop oil reserves. The proximity of the oil fields and relatively weak US presence in the region make Central Asia an attractive energy supplier whose energy interests have not already been dominated by major western oil companies. Compared to China's regional competitor Russia or the politically unstable Middle East, Central Asia could effectively diversify its energy sources and better absorb supply shocks that could threaten China's economic development.

For energy rich Central Asian countries such as Kazakhstan, Uzbekistan, and Turkmenistan, Chinese investment has been viewed as a potential leverage against Russian control over their access to international energy market. As the Chinese national oil companies construct gas pipelines from the landlocked Central Asia, the region's reliance on Russian pipelines is likely to diminish, thereby undermining Russia's control over the region's energy resources and economic development. As such, China's

aggressive energy policy may jeopardize China's relations with Russia, who is reclaiming its international influence in times of high oil prices.

Shanghai Cooperation Organization

One example of such increased regional cooperation is the SCO. SCO was formed in 2001 by the leaders of China, Russia and the Central Asian nations of Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan primarily to deal with terrorism and separatist threats in the region. Energy policy and the development of a common infrastructure have become a recent focus of activity. Inside the SCO, China and Russia are the two dominating players. The relationship between both countries can be described as an uneasy mix of cooperation and competition for regional influence.

For China, however, oil and hopes for turning the old Silk Road across Central Asia into an "energy road" has increasingly become a priority (Fairclough 2006). Some experts, including Lieutenant General William Odom, senior fellow at the Hudson Institute, say that SCO serves as a vehicle for Russia and China to assert their influence in Central Asia and curb US access to region's vast energy supplies (Beehner 2006). Others, like David Wall at the University of Cambridge's East Asia Institute, speculate that an expanded and militarized SCO will essentially become a new Organization of the Petroleum Exporting Countries (OPEC) with bombs (Beehner 2006). The most recent SCO summit in August 2007 further unnerved the US and other major oil importers. The Russian president Wladimir Putin explicitly talked of SCO's role as an "energy club," and India sent its oil minister as a representative at the meeting. Further attracting media attention was the presence of Iranian president, Mahmoud Ahmadinejad, who argued for Iran's membership in the SCO and a stronger cooperation against "domineering powers" of the US. Currently the third-largest supplier of crude oil to China, Iran dangled its oil reserves as an excellent inducement for cooperation (Fairclough 2006). The competition between China, Russia, and other regional powers as India and Iran, for dominance inside of the organisation might however hamper its future development into a strong and effective alliance.

China's Africa policy

China's new Africa policy has been widely discussed in the Western press and development politics. China has been blamed to subordinate democracy and human rights to its economic interests and to back up unsavoury regimes like Sudan with foreign investments as well as by selling weapons and providing diplomatic support. On the other hand, China has become Africa's biggest donor of development aid. African countries like Angola have replaced loans from international donors, e. g. the International Monetary Fund (IMF), that come with a whole range of governance conditions, with grants from China, that come with no strings attached. Most Chinese development aid goes to countries where Chinese companies invest in resource extraction or other economic interests. Chinese development cooperation and diplomacy has transformed the playing field on the African continent and has pushed other international donors to the side. James Traub of the New York Times writes: "*China's Africa policy shows that globalization is*

increasingly divorced from Westernization. We have grown accustomed to the idea that Africa needs us; it's time to recognize that we, like China, need Africa."⁵

By 2010, producing nations in Western Africa will account for one of every three new barrels of oil pumped worldwide. Additional oil will come from Angola, Sudan and other nations like the Democratic Republic of Congo, although political instability still makes effective resource extraction difficult. By 2015, China's imports from Africa might amount to a third of its demand, significantly diminishing its dependence from the Middle East.⁶ Chinese engagement in African countries can be illustrated with the following two examples:

China has become the most active international investor and trading partner for Sudan. Although Chinese companies are not active in the war torn Western province of Darfour, China has come under heavy criticism for backing up the Islamic regime in Khartoum. The China National Petroleum Company (CNPC) holds 40 % state in a consortium to develop large fields and is building a 215 million USD export terminal in Sudan, whose regime has fallen under international criticism over the genocide in Darfour. Currently, Sudan is China's largest overseas production base (Bezlova 2005). China has long opposed UN sanctions against Sudan for its human rights violations and human rights activist argue that oil profits are sustaining the regime (Bezlova 2005). CNPC has also been accused of providing arms to the Sudanese government in exchange for access to oil. Recently, however, Chinese diplomacy has played a helpful role in reaching a compromise on a new UN security force for Darfour. China's foreign policy elite is clearly anxious to avoid conflicts about China's human rights record that might spoil the nation's image abroad, most importantly on the newly won African markets.

Angola has become Africa's fastest growing economy with growth rate of 35.3 % in 2006 alone.⁷ That growth stems from a series of big oil discoveries some 100 miles offshore, which have increased the country's oil production tenfold since the mid-1970s, to 1.5 million b/d in 2006. Next year, Angola is expected to reach two million barrels daily and by 2011, 2.6 million barrels, the equivalent of Kuwait's output. But Angola is finding itself at the crossroads of today's energy geopolitics. It has become the latest stage in a global rivalry playing out among Western, Russian and Chinese oil companies. In 2006, it joined the OPEC, which has been paring global supplies to keep prices from falling below US\$ 50 a barrel. China has identified Angola as a promising source in its rush for energy resources, providing billions in loans and development aid in return for favourable treatment of its oil interests. Last year, Angola overtook Saudi Arabia as the largest oil supplier to the Chinese. It is currently the sixth-biggest exporter to the United States. The Chinese premier, Wen Jiabao, visited Angola over the summer and announced that China had extended another US\$ 2 billion to Angola, on top of US\$ 1 billion announced a few months earlier and the original US\$ 2 billion from 2004. Angola was part of a visit that comprised seven African nations, including the Democratic Republic of Congo, a country that is just beginning to exploit its oil resources. China is now one of Africa's largest customers not only for oil but also for timber, minerals, cotton and other natural resources.

5 An excellently written account of China's engagement in Africa, most notably in Angola (Traub 2006).

6 Numbers from: Oil and Gas Journal estimates, as of Jan. 1, 2007.

7 Source: IMF, quoted from Financial Times, August 10, 2007.

China in turn has flooded Africa with cheap consumer goods. The IMF forecasts that China's trade with Africa will top US\$ 50 billion this year and could reach US\$ 100 billion by 2010. Over the last five years, sub-Saharan Africa's growth rate has almost doubled, to 5.8 % from 3 %. Economists attribute much of the increase to trade with China and other Asian countries. In November 2006, a first summit with African leaders with China's president Hu Jintao took place. Almost all African leaders – excluding those countries that have recognised Taiwan – took part. China announced additional aid to the amount of US\$ 5 billion in preferential loans and credits over the next three years, effectively doubling aid to Africa, while cancelling many outstanding debts. A dozen Chinese companies signed agreements for US\$ 1.9 billion worth of construction projects and investment.⁸

James Traub writes:

“The People's Republic has declared 2006 'the Year of Africa.' The West had its own unofficial Year of Africa in 2005, and it is instructive to compare the two. The industrial nations conducted a sort of moral crusade, with advocacy organizations exposing Africa's dreadful sores and crying shame on the leaders of wealthy nations and those leaders then heroically pledging, at the G8 meeting in July 2007, to raise their development assistance by billions and to open their markets to Africa. Once everyone had gone home, the aid increase turned out to be largely ephemeral and trade reform merely wishful. China, by contrast, offers a pragmatic relationship between equals: the 'strategic partnership' promised in China's African policy is premised on 'mutual benefit, reciprocity and common prosperity.' And the benefits are very tangible.” (Traub 2006)

India's energy diplomacy

Since its independence, India has traditionally been less isolationist than China. In the Cold War, India emerged as a leader of the non-alignment movement. Since the Cold war is over, this loose movement of countries has lost its importance and India its traditional role. Since then, India has emerged as a regional hegemon but with no recognisable strategy beyond the shores of the sub-continent. India's supreme foreign policy objective has always been to isolate neighbouring Pakistan. Energy security considerations are however emerging as a second theme of Indian diplomacy. Over the last decade, India did support anti-Taliban fighters in Afghanistan to gain political influence in a country that could serve as a bridge to energy rich Central Asia. Although India is negotiating a far reaching energy agreement with the US, parallel negotiations with Iran to build new oil and gas export lines, are being advanced. India has lagged behind China in exploring energy investments on the African continent, but recently private companies from India, backed by New Delhi's diplomacy have shown a flurry of activities in diverse African countries. More so even than China, India plans to expand the use of nuclear power for electricity production. Until recently, access to nuclear fuel has been the limiting factor for India's nuclear power program. After having tested nuclear weapons in the early Nineties, India and Pakistan were both put under an international embargo that did not allow either country to import nuclear technology and fuels from the influential “nuclear suppliers

8 Source: IMF, quoted from Financial Times, August 10, 2007.

group”. Now, as part of the newly envisaged India-US energy agreement, this ban might be lifted.

Recently, Russia and India have started to cooperate more closely on energy issues (New York Times 2007). India wants to expand its access to investment in Russia's vast oil reserves. On the agenda is a proposed joint venture to explore for oil in Siberia. India's US\$ 1 billion stake in an existing project called Sakhalin 1 is this country's largest foreign investment. Reliance Industries, an Indian energy company, has floated the idea of investing in a Russian refinery. According to Indian officials, Russia has also expressed an interest in investing in a pipeline that would carry natural gas from Iran through Pakistan to India. The Bush administration has repeatedly expressed reservations about the project. Far more important, analysts pointed out, Moscow is already New Delhi's largest defence partner. Paradoxically, when the India-United States nuclear deal opens the door for New Delhi to buy nuclear technology to expand its civilian nuclear program, Russia may benefit. India would be allowed to purchase nuclear fuel, reactors and other technology on the world market, but only after it gained approval from the 45-nation Nuclear Suppliers Group, which regulates international atomic energy trade. Russia is already building two nuclear reactors in this country and is prepared to do more.

So far, China and India have only cooperated sporadically when their interests were in alignment, and not on a strategic level. That however, could change in the future. China and India have agreed a kind of “non-aggression” pact between both countries' internationally active energy companies. Both countries also opposed a recent climate change debate in the UN Security Council that was put on the agenda by the Council's British Presidency. Both assert the “common but differentiated responsibilities” principle in the UN climate negotiations. In international politics in general, they both insist on the “principle of non-interference”. China evoked this principle in the case of Sudan, although Chinese diplomacy became rather involved in addressing the challenge behind the scenes.

3 Regional and global challenges

China and India have recently started to play a more active role in the United Nations system and other international institutions as the World Trade Organization (WTO) and the International Financing Institutions (IFIs). China positions itself – to quote former US Secretary of State Madeleine Albright – as a “responsible stakeholder” on the world stage. India has traditionally been the leader of the non-alignment movement in the UN. Since this movement has faded away in the aftermath of the Cold War, India strives to become a regional power in the more traditional sense.

The Western powers, who still dominate the international system, have not yet decided whether to integrate China, India and other emerging economies fully into the system of international governance or whether to play them off against each other. Sometimes, traditional geopolitical thinking still prevails. One major example for that approach is the India-US energy agreement that seems to be largely motivated by US intentions to balance China's regional influence by aligning itself with India. Traditionally, US politics in the region have relied on India's geopolitical rival Pakistan. America's effort to build stronger ties with India therefore represents a major shift which can to a large extent be explained by Washington's preoccupation with the rise of China.

Governance responses

Several important international organisations have to decide how to accommodate the growing role of China and India on the international stage.

China is the only developing country which serves as a permanent member of the UN Security Council. Reform of the Council that would include India, Brazil, and maybe South Africa, as additional permanent members have been remaining elusive after the failure of the recent UN reform summit in 2005. Nevertheless, new initiatives have been started at the opening session of the 62th General Assembly of 2007. The Security Council has recently started to address non-traditional threats to security, including climate change, although China has voiced its opposition to such an expanded definition of security.

A frequently overlooked UN body, that plays an increasingly important role in governing energy related conflicts, is the UN Convention on the Law of the Sea (UNCLOS). UNCLOS and its Commission on the Limits of the Continental Shelf settle conflicts around the extension of a nation's maritime shelves and borders. Those borders have become more important as more and more energy resources are being discovered offshore.

A broader approach to environmental governance on a global scale – considering the growing role of China and India with regard to environmental issues – could be taken, if existing institutions and treaties would be integrated into a new Global Environmental Organisation (GEO) or a coordinating mechanism around the existing United Nations Environment Programme (UNEP).⁹ Energy governance would have to be part of the core mission of such a new body.

Voting rights in the both Bretton Woods organisations, the World Bank and the IMF are biased towards Europeans and Americans. Recent efforts to reform the IMF and give more shares and voting rights to China and other emerging economies failed, mainly because of European resistance. The World Bank is traditionally being headed by an American and the IMF by a European. Recent changes in leadership cemented this tradition at least for the next five years.

European governments have advocated a paradigm shift of international energy financing from major oil, gas or hydropower projects to renewable energies and energy efficiency. This shift will only happen if the main customers of the World Bank and other regional development banks go along with it. A reorientation of international energy lending can only take place if Chinese lending in Africa or Brazilian lending in South America do not compete with such a new approach towards sustainable development.

The Organisation for Economic Cooperation and Development (OECD) and its sister organisation, the IEA have carefully moved to include new members, as most recently Mexico and South Korea. Since 2006, the OECD is being led by a Mexican national who has announced to open the organisation to newly emerging economies. However, at the

9 The former idea has been diplomatically advanced by France and Germany, with the backing of the EU. The latter concept was developed through the Global Environmental Governance project, which was coordinated by Yale University, and in which one of the authors (Müller-Kraenner, Sascha) played an active role. See also Esty / Ivanova (2002).

recent G8 summit, the leaders of the dominating economies mandated the OECD only to open a dialogue process with those emerging economies (the so called Heiligendamm Process), rather than starting a process towards full membership. Both the OECD and the IEA already collect numerous data about China and India. The sister organisations run offices in both countries, provide their analytical capabilities and give advice for economic reform. Their data on energy production and consumption are widely used and relied upon. However, full participation in OECD/IEA remains elusive as long as Western governments do not want to share their influence on those organisations.

The exclusion of the emerging economies from the informal but influential club of the G8 itself is highly symbolic. The G8 have stopped to represent the world's major economies. Such a forum would have to include China and maybe India or Brazil. The current arrangement of informal "G8+5" arrangements, or ad hoc invitations of additional countries to the summit's deliberations, does neither produce results nor enjoy legitimacy. The Heiligendamm G8 summit in June 2007 might have been the last occasion when China, India and other representatives of emerging powers were willing to wait in the anteroom and listen to pre-conceived results of the big 8's deliberations.

The G8 Summit 2007 has also asked to "increase transparency, predictability and stability of global energy markets". Most importantly, China, India, Mexico, Brazil and South Africa are requested to adopt a set of "Global Energy Security Principles" and to establish strategic oil reserves with the assistance of the IEA (G8 Summit Heiligendamm 2007).

Climate change

China and India play a central role in the ongoing negotiations for a post-Kyoto climate regime. China has or will surpass the US in the coming years as the world's largest greenhouse gas emitter. India's emissions still lag behind but are rising rapidly. A meaningful response to global warming will not be possible if either country will be excluded from the post-Kyoto deal. More importantly, from a political perspective, neither the US or Japan, nor the Europeans, will sign up to farther reaching greenhouse gas reduction commitments if China and India will not also become part of a new global treaty.

Such a deal, however, will be difficult to negotiate. The formal negotiations inside the United Nations Framework Convention on Climate Change (UNFCCC) will start in Bali (Indonesia) in December 2007. Climate change also figures prominently in numerous other institutions and discussions that are taking place. Unfortunately, a rational framework that integrates all those discussions is not yet in place. The Heiligendamm G8 Summit has confirmed the centrality of the UN in negotiating a new global agreement. This position is broadly shared by the so called "O5" emerging economies (China, India, Mexico, Brazil, South Africa) and most other developing countries. However, emerging economies will only take up additional commitments if parallel agreements on technology transfer, the financing of climate friendly energy infrastructure, and climate change adaptation are being reached.

Michael Jacobs, climate change advisor to the British Prime Minister Gordon Brown, writes:

“The ‘near negotiation’ processes focusing on real energy investment does not yet exist. The UK-initiated Gleneagles Dialogue has so far operated at a general discussion level, while various other relevant discussions go on elsewhere – the US-led Asia Pacific Partnership (AP6 - US, Australia, Japan, China, S Korea, India), the IFIs, etc. There is no overall framework. (...) This means, effectively, that there are at least seven processes in train – the UNFCCC (which itself has two strands, inside and outside the Kyoto Protocol), G8+5, the Gleneagles Dialogue, the UN Secretary General’s initiative, the US emitters’ meeting and AP6. (...) Different countries are involved in each of these. Bringing all these processes together in a rational form will be extremely difficult, but failure to do so will involve a major waste of effort and time. We are now working very closely with the Germans to seek to do this, and need to engage the US, and then Japan and the +5 urgently.” (Jacobs 2007)

4 Recommendations for the EU’s energy foreign policy towards China and India

Marco Polo was the first European who travelled to China and talked to his European compatriots about the marvels of another world. Today, business relationships between Europe and China are closer than ever but the political relationship is lacking behind.¹⁰ India still holds a privileged relationship with the United Kingdom and maintains relations with the EU through a cooperation agreement from 1994.

The European Security Strategy (ESS) sets the aim to develop “strategic partnerships” (EC 2003) both with China and India. Although the term is ambivalent, and consciously so, in general understanding it means a long-term, broad based relationship to mutual benefit.¹¹ Very obviously, the EU does not have a coherent China policy (EC 2003). Such deficiency should not come as a surprise. The Common Foreign and Security Policy, aimed at coordinating the foreign policy of the EU Member States, is a work in progress. It develops in stages and in concentric circles around the European territory.

However, the EU would be well advised to adopt and implement a coherent China policy for a number of reasons. Right now, the EU’s major member states compete for economic influence with China without coordinating their trade and export initiatives as part of a common bilateral framework. History has repeatedly shown that major changes in the balance of power among nations and regions have rarely occurred peacefully. The global arena has yet to adjust to the shift in balance of power away from the West to the East with the growing emergence of Asian nations, primarily of China and India. As the unique and successful example of an integrated regional community and power, the EU has much wisdom to share with other members of the global community and much to contribute in the construction of a new world order.

10 The sketchy character of the EU’s China strategy is being discussed by the European Commission (EC 2003).

11 This is the definition that Germany’s foreign minister Frank-Walter Steinmeier applied when he talked about another of the EU’s strategic partnerships (with Russia) at the Munich Security Conference in 2006 (Steinmeier 2006).

China's role in international organizations is growing and can only continue to grow as the world anticipates China to replace Japan as the world's second largest economy. In the United Nations, it holds a permanent seat in the Security Council. In the WTO, China has developed into the most prominent player next to the EU and the US. China is an active member in the Association of Southeast Asian Nations (ASEAN+3) and the Asia-Pacific Economic Cooperation (APEC). China's currency, the Yuan, plays a growing role in both Asia's and the global currency system. The Chinese government can influence the system significantly by controlling exchange rates and by the mere fact that it holds a significant part of the US national debt. China's active participation is also anticipated and needed in a number of significant international treaties as the Kyoto Protocol on climate change. Given the importance of China's potential impact in the global arena, it is in the EU's interest to actively involve China as a responsible stakeholder. Both regionally and internationally, China has become an important partner to the European Union and others in resolving security, economic and governance crises. Ultimately, it is in the EU's best interest as a global power to coordinate a cohesive EU-China policy in conjunction with its transatlantic policy and thereby contribute to the global balance of power.

Both the EU and China have developed strategic partnerships with their common neighbour Russia. Both partnerships cover a broad array of security and economic interests. Most importantly, however, is Europe's and China's common interest in Russia's oil and gas resources. Both China and the EU depend on energy imports from Russia. This dependency is projected to grow when other sources of oil and gas imports run dry and when all planned infrastructure projects with Russia are being implemented. On their summit meeting in September 2006, China and the EU signed a common declaration on energy security that mirrors the agreed principles of the G8 summit in St. Petersburg. Both sides want to cooperate on new energy technologies, most notably renewable energies and CCS, as well as in the creation of common markets. Both partners also want to coordinate their actions as customers for energy imports towards third parties – again, most notably Russia.

Until today, Russia's Eastern and Western pipelines networks are not fully linked. China still imports Russian oil by train. However, in the future, competition on access and investment in Russia's energy resources will grow. If the EU and China, together with Russia, do not manage to pool their interests in a cooperative manner, the potential for conflict will grow considerably. The European Energy Charter – a framework agreement that has not yet been ratified by the Russian Duma but in which China possesses an observer status – could be used for that purpose (Vertrag über die Europäische Energiecharta 1994).

The US has recently tried to balance China's rising influence by shifting military and technological support to India. Europe's approach should not be to rely on a system of "balance of power" but to offer its unique experience of cooperative problem solving in common institutions to this region that is even more fragmented politically than Europe was after the Second World War. Energy cooperation could lead the way in that regard, as it did in post war Europe when the European Community for Coal and Steel (ECCS) was constructed, the first predecessor of today's European Union. The Northeast Asian region is beset with a growing number of challenges, including trans-national environmental issues, especially relating to air pollution, which need to be resolved by China and its neighbours. The East Asian economic alliance of ASEAN could be a crystallisation point

for such an effort. East Asian nations have already started to cooperate on cross border air pollution, an issue that is closely related to energy production. Those efforts are based on Europe's agreements on transboundary air pollution that were negotiated under the auspices of UN-ECE in the last years of the Cold War.

European-Chinese relations should be considered to be in a "pre-political stage". They are dominated by the trade and economic policy interests of individual Member States. Strategic considerations on China's future role in the multilateral system and in a Euro-Asian security structure continue to play a secondary role. In principle, the European Union would be China's partner of choice on the international scene. Without posing a security threat to China, The EU carries enough economic and political weight to counter balance US and Russian influence in the region. In the past decade, Europe's interest has mainly focussed on building a strategic relationship with emerging China. However, India and other South and East Asian countries should not be forgotten when the EU develops a new "Eastern policy". India, Japan and South Korea are the region's major democracies and should be natural partners for Europe in the region.

Bibliography

- Beehner, L.* (2006): The Rise of the Shanghai Cooperation Organization, Council on Foreign Relations, 12 June 2006; online: http://www.cfr.org/publication/10883/rise_of_the_shanghai_cooperation_organization.html#4
- Bezlova, A.* (2005): Seeking oil in troubled waters, in: *Spero News* 19 Sept. 2005; online: <http://www.speroforum.com/site/article.asp?idCategory=33&idsub=122&id=1921>
- Chipaux, F.* (2006): Le dilemme nucléaire indien, in: *Le Monde* 2 March 2006
- Collier, R.* (2005): China on global hunt to quench its thirst for oil, in: *San Francisco Chronicle* 26 June 2005; online: <http://www.sfgate.com/cgi-bin/article.cgi?file=/c/a/2005/06/26/MNG27DF8HQ1.DTL>
- Downs, E. S.* (2004): The Chinese Energy Security Debate, in: *The China Quarterly* 177, 21–41
- EC (European Commission) (2003): A maturing partnership – shared interests and challenges in EU-China relations, COM (2003) 533 fin, Brussels
- Council of the European Union* (2003): European Security Strategy – A Safer Europe in a Better World, Brussels
- Economist* (2007): Briefing: China's military might – The long march to be a superpower, 4 Aug. 2007
- EIA (Energy Information Agency) (2005): Country Analysis Briefs China, August 2005; online: <http://www.eia.gov/emeu/cabs/china.html>
- (2007): Country Analysis Briefs India, January 2007; online: <http://www.eia.doe.gov/emeu/cabs/India/Full.html>
- EIU (Economist Intelligence Unit) (2006): Pursuit of Power, in: *Business Asia* 26 June 2006
- Esty, D. / M. Ivanova* (ed.) (2002): Global Environmental Governance – Options & Opportunities, New Haven, Conn.: Yale University, Yale School of Forestry & Environmental Studies
- Fairclough, G.* (2006): Politics & Economics: Iran Lobbies China, Russia to Help Curb US, in: *The Wall Street Journal* 16 June 2006
- G8 Summit Heiligendamm* (2007): Growth and responsibility in the World Economy: Summit Declaration, 07 June 2007
- Gu, X. / K. Kupfer* (2006): Die Energiepolitik Ostasiens, Frankfurt a. M.: Campus
- Herbert, G. et al.* (2006): Prospects of wind energy in India, in: *International Journal of Global Energy Issues* 26 (3-4), 258–287
- IEA (International Energy Agency) (2004): World Energy Outlook 2004, Paris
- (2006): World Energy Outlook 2006, Paris
- Jacobs, M.* (2007): International Climate Change Strategy, in: *UK Non-Paper*, 19 July 2007
- Lelyveld, M.* (2006): China Faulted for Africa Oil Deals, in: *Radio Free Asia* 25 Jan. 2006; online: http://www.rfa.org/english/features/lelyveld/2006/01/25/china_africa/
- Müller-Kraenner, S.* (2007): Energiesicherheit – Die neue Vermessung der Welt, München: Kunstmann
- New York Times* (2007): Putin in India: Visit is Sign of Durability of Old Times, 25 Jan. 2007
- Yale Center for Environmental Law & Policy* (2005): 2005 Environmental Sustainability Index; online: http://www.yale.edu/esi/ESI2005_Main_Report.pdf
- Scholvin, S.* (2007): Die Energiepolitik neuer regionaler Führungsmächte, Hamburg: German Institute of Global and Area Studies / Leibniz-Institut für Globale und Regionale Studien (GIGA Focus 5)
- Shambaugh, D.* (2005): China engages Asia – Reshaping the regional order, in: *International Security* 29 (3), 64–99
- Steinmeier, F.-W.* (2006): Russia, Europe and the world: prospects for cooperation on global security issues, Speech by Frank-Walter Steinmeier, Federal Minister for Foreign Affairs, at the 42nd Munich Conference on Security Policy, 5 Feb. 2006
- Traub, J.* (2006): China's African Adventure, in: *New York Times* 19 Nov. 2006; online: <http://query.nytimes.com/gst/fullpage.html?res=9A01E7D7163EF93AA25752C1A9609C8B63&sec=&spon=&pagewanted=7>
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